

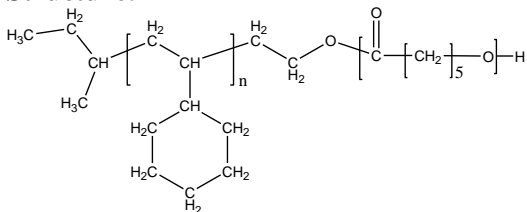
Sample Name:

Poly Vinyl Cyclohexane-b- ϵ -Caprolactone

**Synonym: Poly Cyclohexyl ethylene-b-
 ϵ -Caprolactone**

Sample #: **P40575-VCHCL**

Structure:



Composition:

Mn x 10 ³	PDI
5.0-b-60.0	1.3
T _g (PCL):	-64 °C
T _m (PCL):	57 °C

Synthesis Procedure:

The polymer was synthesized from OH terminated Poly Vinyl cyclohexane.

Characterization:

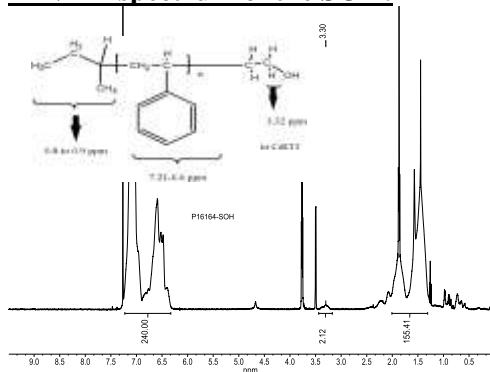
The product was characterized by size exclusion chromatography (SEC) and ¹H NMR.

Thermal analysis was performed on TA Instruments Q100 differential scanning calorimeter (DSC) under a nitrogen atmosphere. The melting point (T_m) and glass transition temperature (T_g) of the polymer were measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

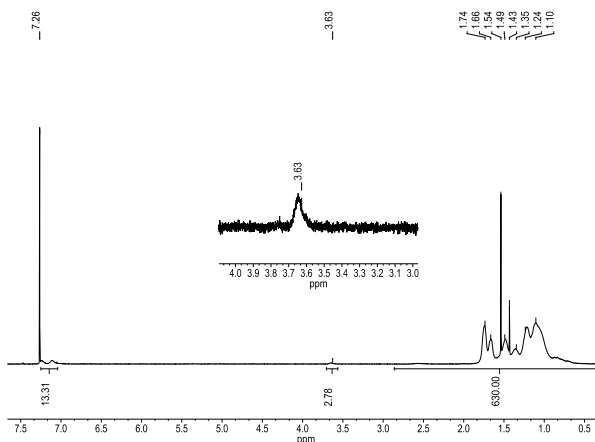
Solubility:

Polymer is soluble in toluene, THF, CHCl₃ and can be precipitated in water and cold methanol.

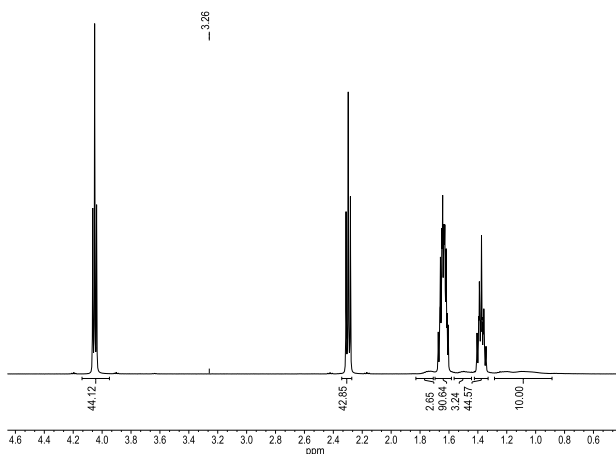
¹H NMR spectrum of the SOH:



¹H NMR spectrum of the PVCH OH:

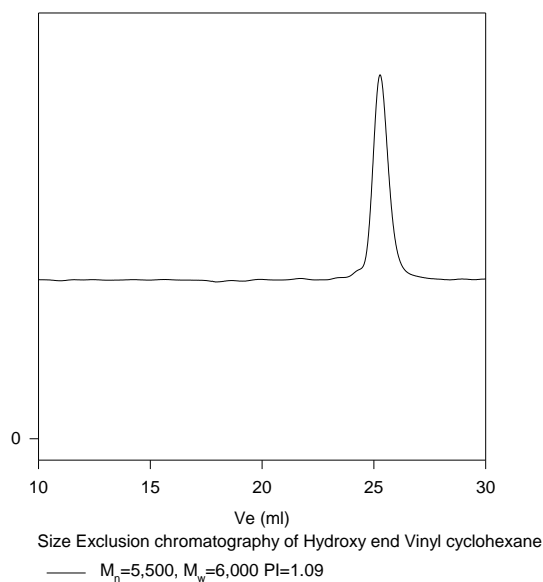


¹H NMR spectrum of the block coPolymer:



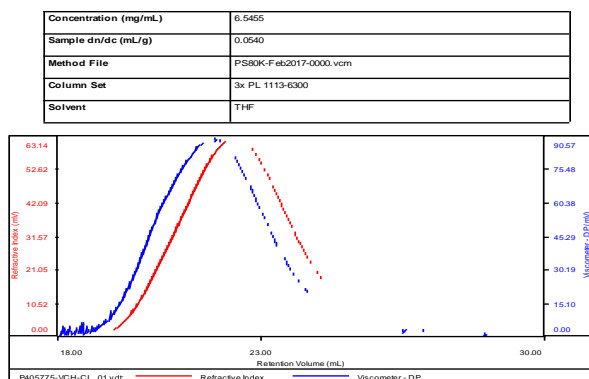
SEC elugram of the PVCH OH:

P40405-VCHOH



SEC elugram of the block copolymer

P40575-VCH-CL



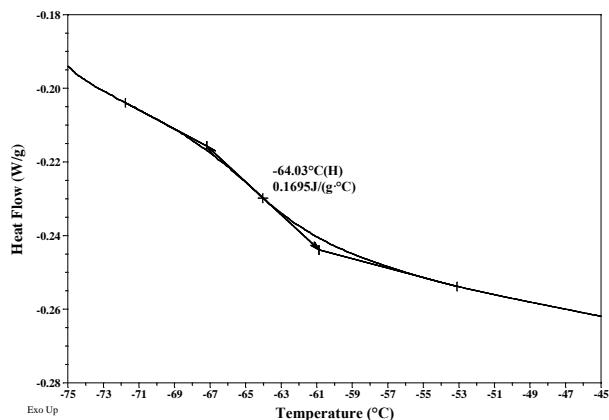
Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P405775-VCH-CL_01.v	65,277	86,333	1.323	1.3373	68,113

DSC thermograms of the polymer:

— 2nd heating scan at 10°C/min

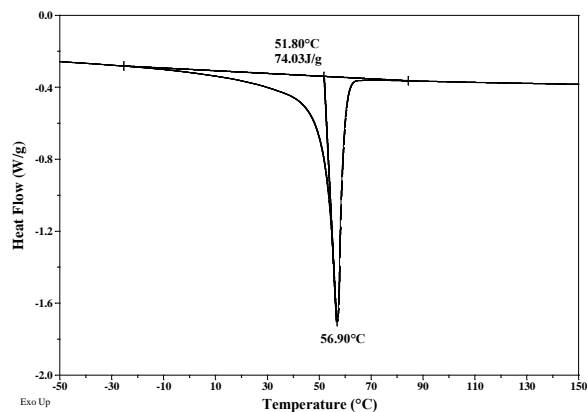
Sample: P40575_VCHCL
Size: 10.5000 mg

File: P40575-VCHCL.001



Sample: P40575_VCHCL
Size: 10.5000 mg

File: P40575-VCHCL.001



— 2nd heating scans at 10°C/min and 3rd cooling scan at 30°C/min:

Sample: P40575_VCHCL
Size: 10.5000 mg

File: P40575-VCHCL.001

